

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in this application.

Listing of Claims:

Claims 1 - 20 (canceled)

Claim 21. (new) A motorized operator for a swing door comprising:

a frame;

a motor supported on said frame;

a gear reduction drive mechanism supported on said frame and drivenly connected to said motor, said gear reduction drive mechanism including an output shaft having a part configured for connection to a door for moving said door in one direction and in an opposite direction;

a sprocket connected to said output shaft and drivingly engaged with a chain trained over said sprocket, said chain having opposed runs;

a single coil spring energy storage member supported on said frame;

an elongated shaft supporting a member engaged with said spring at one end of said spring for exerting compression forces on said spring and returning compression forces through said elongated shaft; and

a link member connected to said elongated shaft and to said opposed runs of said chain, whereby, in response to rotation of said output shaft in one direction one of said runs becomes taut and the other run becomes slack to compress said spring and store energy in said spring, and said spring is operable to return energy through said one run to said output

Appl. Ser. No. 10/749,636
Amendment Dated May 1, 2006
Reply to Office Action of December 1, 2005

shaft to rotate said output shaft in an opposite direction to assist in movement of said door.

Claim 22. (new) The operator set forth in Claim 21 wherein:

said link member is mounted for limited pivotal movement on an end of said elongated shaft.

Claim 23. (new) The operator set forth in Claim 21 wherein:

said frame includes a pair of spaced apart plates for supporting parallel shafts of said gear reduction drive mechanism and including said output shaft.

Claim 24. (new) The operator set forth in Claim 23 wherein:

said frame includes opposed end plates connected to said pair of spaced apart plates, one of said end plates supporting said motor and the opposite end plate operably engaged with said spring.

Claim 25. (new) The operator set forth in Claim 24 wherein:

said frame includes opposed faces mounted on a support plate for selective positioning of said frame with respect to said support plate.

Claim 26. (new) The operator set forth in Claim 21 wherein:

said chain comprises a roller chain.

Claim 27. (new) A motorized operator for a swing door comprising:

 a frame;
 a motor supported on said frame;
 a gear reduction drive mechanism supported on said frame and drivenly connected to said motor, said gear reduction drive mechanism including an output shaft having a part configured for connection to a door for moving said door in one direction and in an opposite direction;
 a sprocket connected to said output shaft and drivingly engaged with a roller chain trained over said sprocket, said chain having opposed runs;
 a single coil spring energy storage member supported on said frame;
 an elongated shaft supporting a member engaged with said spring at one end of said spring for exerting compression forces on said spring and returning compression forces through said elongated shaft; and
 a link member mounted for limited pivotal movement on said elongated shaft and connected to said opposed runs of said chain, whereby, in response to rotation of said output shaft in one direction one of said runs becomes taut and the other run becomes slack to compress said spring and store energy in said spring, and said spring is operable to return energy through said one run to said output shaft to rotate said output shaft in an opposite direction to assist in movement of said door.

Claim 28. (new) A motorized operator for a swing door comprising:

a frame including a pair of spaced apart plates and opposed end plates connected to said pair of spaced apart plates;

a motor supported on said frame at one of said end plates;

a gear reduction drive mechanism supported on said spaced apart plates and drivenly connected to said motor, said gear reduction drive mechanism including an output shaft having a part configured for connection to a door for moving said door in one direction and in an opposite direction;

a sprocket connected to said output shaft and drivingly engaged with a chain trained over said sprocket, said chain having opposed runs;

a single coil spring energy storage member supported on said frame at the other of said end plates;

an elongated shaft supporting a member engaged with said spring at one end of said spring for exerting compression forces on said spring and returning compression forces through said elongated shaft; and

a link member connected to said elongated shaft and to said opposed runs of said chain, whereby, in response to rotation of said output shaft in one direction one of said runs becomes taut and the other run becomes slack to compress said spring and store energy in said spring, and said spring is operable to return energy through said one run to said output shaft to rotate said output shaft in an opposite direction to assist in movement of said door.